Ė

Figure 1A

No.	Kinase-Subclass	Family	Sub	Protein	αD sequence
1	Serine/Threonine	RAF.		c-Raf	TQWCEGSSLYKHLHVQETK
•					F ·
				1	
2	Serine/Threonine	RAF		Araf	TOWCEGSSLYHHLHVADTR
-	GCIMO TIROCIMIO				F
				İ	
	Serine/Threonine	RAF		Braf	TOWCEGSSLYHHLHIIETKF
3	Serine/Inreonine	· KAr		Bian	10 11 020002 11222
					ì
		GA DV		cAPKa	MEYVPGGEMFSHLRRIGRF
4	Serine/Threonine	CAPK		CAPKa	METVFGGENIFSTERGGIG
	•	İ		- ·	·
				<u> </u>	CONTROL CONTROL PRICE
4	Serine/Threonine	CAPK		cAPKb	MEYVPGGEMFSHLRRIGRF
				İ	
5	Serine/Threonine	CAPK		cAPKg	MEYVPGGEMFSRLQRVGRF
l					
		•			
6	Serine/Threonine	PKC		PKCa	MEYVNGGDLMYHIQQVGK
		}		ļ	F
			1		
7	Serine/Threonine	PKC		PKCb	MEYVNGGDLMYHIQQVGR
[,			-	F
8	Serine/Threonine	PKC		PKCg	MEYVTGGDLMYHIQQLGKF
ľ	Scrince incomic	1110			
1		ľ			
<u></u>	Serine/Threonine	PKC		PKCd	MEFLNGGDLMFHIQDKGRF
9	Serine/Inreonine	IRC		I Rea	1,12,2,13,12,12
	·		İ		
<u></u>		7770	 	PKCe	MEYVNGGDLMFQIQRSRKF
10	Serine/Threonine	PKC		PRCE	MET VIOGEDENII QIQICEIGE
					1
L				1200	A WELLOW COLL MELLION CRAPE
11	Serine/Threonine	PKC		PKCet	MEFVNGGDLMFHIQKSRRF
				1.	
12	Serine/Threonine	PKC		PKCth	MEYLNGGDLMYHIQSCHKF
					·
			<u> </u>		<u> </u>

Figure 1B

13	Serine/Threonine	Akt/PKB	Akt1/Raca	MEYANGGELFFHLSRERVF
13	Serine/Threonine	Akt/PKB	Akt2/Racb	MEYANGGELFFHLSRERVF
14	Serine/Threonine	GSK3	GSK3a	LEYVPETVYRVARHFTKAK LII
15	Serine/Threonine	GSK3	GSK3b	LDYVPETVYRVARHYSRAK QTL
16	Serine/Threonine	CK II	CK IIa	FEHVNNTDFKQLYQTL
17	Serine/Threonine	CK II	CK IIa'	FEYINNTDFKQLYQIL
18	Serine/Threonine	bARK1,2	bARK1	LDLMNGGDLHYHLSQHGV F
18	Serine/Threonine	bARK1,2	bARK2	LDLMNGGDLHYHLSQHGV F
19	Serine/Threonine	GRK1	GRK1	MTIMNGGDIRYHIYNVDED NPGF
20	Serine/Threonine	GRK4	GRK4	LTIMNGGDLKFHIYNLGNPG F
21	Serine/Threonine	GRK5	GRK5	LTIMNGGDLKFHIYNMGNP GF
22	Serine/Threonine	GRK6	GRK6	LTLMNGGDLKFHIYHMGQA GF

Figure 1C

23	Serine/Threonine	CaMK		CaMK I	MQLVSGGELFDRIVEKGGY
24	Serine/Threonine	CaMK		CaMK IIa	FDLVTGGELFEDIVAREYY
				·	
24	Serine/Threonine	CaMK		CaMK IIb	FDLVTGGELFEDIVAREYY
24	Serine/Threonine	CaMK		CaMK IIg	FDLVTGGELFEDIVAREYY
24	Serine/Threonine	CaMK		CaMK IId	FDLVTGGELFEDIVAREYY
25	Serine/Threonine	POLO		Plk	LELCRRSLLELHKRRKAL
23	Serme/Timedimie	I OLO			EEEERAGELEETRAGGAL
26	Serine/Threonine	POLO		Plx1	LELCRRSLLELHKRRKAV
27	Serine/Threonine	POLO		polo	LELCKKRSMMELHKRRKSI
				·	
28	Serine/Threonine	POLO		SNK	LEYCSRRSMAHILKARKVL
29	Serine/Threonine	POLO		CDC5	LEICPNGSLMELLKRRKVL
		7010			A ED (CIDICE) O DIA IO MAIO
30	Serine/Threonine	POLO		Sak	LEMCHNGEMNRYLKNRVK PF
31	Serine/Threonine	POLO		Prk	LELCSRKSLAHIWKARHTL
1	Serme, I meonine				DDDODIGODA HII WIM HATTI
			<u> </u>	<u> </u>	

1.50

Figure 1D

31	Serine/Threonine	POLO		Fnk	LELCSRKSLAHIWKARHTL
32	Serine/Threonine	POLO		Plo1	LELCEHKSLMELLRKRKQL
	w				
33	Serine/Threonine	MARK/p 78		MARK1	MEYASGGEVFDYLVAHGR M
33	Serine/Threonine	MARK/p 78	·	MARK2	MEYASGGEVFDYLVAHGR M
34	Serine/Threonine	MARK/p 78		P78	MEYASGGKVFDYLVAHGR M
35	Serine/Threonine	CDK		CDK2	FEFLHQDLKKFMDASALTGI
36	Serine/Threonine	CDK		CDK4	FEHVDQDLRTYLDKAPPPG L
37	Serine/Threonine	CDK		CDK6	FEHVDQDLTTYLDKVPEPG V
38	Tyrosine	SRC		c-Src	TEYMSKGSLLDFLKGETGK YL
39	Tyrosine	SRC		c-Yes	TEFMSKGSLLDFLKEGDGK YL
40	Tyrosine	SRC		Fyn	TEYMNKGSLLDFLKDGEGR AL
41	Tyrosine	SRC		c-Fgr	TEFMCHGSLLDFLKNPEGQ DL

Figure 1E

42	Tyrosine	LYN/HC K		Lyn	TEYMAKGSLLDFLKSDEGG KV
43	Tyrosine	LYN/HC K		Hck	TEFMAKGSLLDFLKSDEGS KQ
44	Tyrosine	LCK		Lck	TEYMENGSLVDFLKTPSGIK L
45	Tyrosine	CSK		Csk	TEYMAKGSLVDYLRSRGRS VL
46	Tyrosine	CSK		Matk	MEHVSKGNLVNFLRTRGRA LV
47	Tyrosine	FAK		Fak	MELCTLGELRSFLQVRKYSL
48	Tyrosine	ABL		c-Abl	TEFMTYGNLLDYLRECNRQ EV
49	Tyrosine	ENDOTH ELIAL	Tie/Tek	Tie	IEYAPYGNLLDFLRKSRVLE TDPAFAREHGTASTL
50	Tyrosine	ENDOTH ELIAL	Tie/Tek	Tek	IEYAPHGNLLDFLRKSRVLE TDPAFAIANSTASTL
51	Tyrosine	ENDOTH ELIAL	FGFR	Flg	VEYASKGNLREYLQARRPP GLEYCYNPSHNPEEQL
52	Tyrosine	ENDOTH ELIAL	FGFR	Bek	VEYASKGNLREYLRARRPP GMEYSYDINRVPEEQM
53	Tyrosine	ENDOTH ELIAL	FGFR	FGFR-3	VEYAAKGNLREFLRARRPP GLDYSFDTCKPPEEQL

Figure 1F

54	Tyrosine	ENDOTH ELIAL	FGFR	FGFR-4	VECAAKGNLREFLRARRPP GPDLSPDGPRSSEGPL
55	Tyrosine	ENDOTH ELIAL	PDGFR	PDGFR-a	TEYCFYGDLVNYLHKNRDS FLSHHPEKPKKELDIFGLNP A
56	Tyrosine	ENDOTH ELIAL	PDGFR	PDGFR-b	TEYCRYGDLVDYLHRNKHT FLQHHSDKRRPPSAELYSNA L
57	Tyrosine	ENDOTH ELIAL	Flt/Flk	Flt1	VEYCKYGNLSNYLKSKRDL FFLNKDAALHMEPKKEKME PG
58	Tyrosine	ENDOTH ELIAL	Flt/Flk	Flt4	VEFCKYGNLSNFLRAKRDA FSPCAEKSPEQRGRFRAMV EL
59	Tyrosine	ENDOTH ELIAL	Flt/Flk	Flk1	VEFSKFGNLSTYLRGKRNEF VPYKSKGARFRQGKDYVGE L
60	Tyrosine	HGFR		c-Met	LPYMKHGDLRNFIRNETHN P
61	Tyrosine	HGFR		c-Sea	LPYMRHGDLRHFIRAQERSP
62	Tyrosine	HGFR		Ron	LPYMCHGDLLQFIRSPQRNP
63	Tyrosine	EGFR		EGFR	TQLMPFGCLLDYVREHKDN I
64	Tyrosine	EGFR		ErbB2	TQLMPYGCLLDHVRENRGR L
65	Tyrosine	EGFR		ErbB3	TQYLPLGSLLDHVRQHRGA L

Figure 1G

66	Tyrosine	EGFR		ErbB4	TQLMPHGCLLEYVHEHKDN
					ĮI
		· ·			
67	Tyrosine	RET		Ret	VEYAKYGSLRGFLRESRKV
			•		GPGYLGSGGSRNSSSLDHPD ERAL
68	Tyrosine	TRK-		Trk -	FEYMRHGDLNRFLRSHGPD
		NGFR		NGFR	AKLLAGGEDVAPGPL
-60		TRK-		TrkB	FEYMKHGDLNKFLRAHGPD
69	Tyrosine	NGFR		TIKE	AVLMAEGNPPTEL
		Nork			
70	Tyrosine	TRK-		TrkC	FEYMKHGDLNKFLRAHGPD
, ,	17.00	NGFR			AMILVDGQPRQAKGEL
'					
71	Tyrosine	SYK/ZA	-	Syk	MEMAELGPLNKYLQQNRH
		P70			V
				7 70	MEMAGGGPLHKFLVGKRE
72	Tyrosine	SYK/ZA P70		Zap70	EI
		170			
73	Tyrosine	TYK/JA		Jak1	MEFLPSGSLKEYLPKNKNKI
1,3	17.00	K			·
				·	
74	Tyrosine	TYK/JA		Jak2	MEYLPYGSLRDYLQKHKER
	·	K			I
L	·			1,10	MEYLPSGCLRDFLQRHRAR
75	Tyrosine	TYK/JA K		Jak3	L L
		~			
76	Tyrosine	TYK/JA		Tyk2	MEYVPLGSLRDYLPRHSI
′°	1 yrosino	K			
	<u> </u>				
77	Serine/Threonine	IAK		Iak1	LEYAPLGTVYRELQKLSKF

Figure 1H

78	Serine/Threonine	CHK		Chk1	LEYCSGGELFDRIEPDIGM
79	Serine/Threonine	IKK		IKK-1	MEYCSGGDLRKLLNKPENC CGL
80	Serine/Threonine	IKK		IKK-2	MEYCQGGDLRKYLNQFEN CCGL
81	Serine/Threonine	DAPK		DAPK	LELVAGGELFDFLAEKESL
82	Tyrosine	IRK		IRK	MELMAHGDLKSYLRSLRPE AENNPGRPPPTL
83	Serine/Threonine	Activin/T GFbR	TGFbR	TGFbRII	TAFHAKGNLQEYLTRHVI
84	Serine/Threonine	Activin/T GFbR	ACTR	ACTRIIA	TAFHEKGSLSDFLKANVV
85	Serine/Threonine	Activin/T GFbR	ACTR	ACTRIIB	TAFHDKGSLTDYLKGNII
86	Serine/Threonine	Activin/T GFbR	ALK	ALK1	THYHEHGSLYDFLQRQTL
87	Serine/Threonine	Activin/T GFbR	ALK	ALK2	THYHEMGSLYDYLQLTTL
88	Serine/Threonine	Activin/T GFbR	ALK	ALK3	TDYHENGSLYDFLKCATL
89	Serine/Threonine	Activin/T GFbR	ALK	ALK4	SDYHEHGSLFDYLNRYTV

16.

Figure 1I

89	Serine/Threonine	Activin/T GFbR	ALK	ALK5	SDYHEHGSLFDYLNRYTV
90	Serine/Threonine	Activin/T GFbR	ALK	ALK6	TDYHENGSLYDYLKSTTL
91	Tyrosine	DDR		DDR1	TDYMENGDLNQFLSAHQL
92	Tyrosine	DDR		DDR2	TEYMENGDLNQFLSRHEP
93	Serine/Threonine	ILK		ILK	THWMPYGSLYNVLHEGTNF VV
94	Tyrosine	MAPK		JNK	MELMDANLCQVIQMEL

Protein Kinase

Figure 2A

```
TQWCEGSSLYKHLHIETKF
c-Raf
        SNFSDATTIFH
Y * MWR
                                Ι
                                    VDSRW
Araf
                                M
                                    M *
Braf
                                ٧
                                    L
        MEYVPGGEMFSHLRRIGRF
cAPKa
        IQFLNAADLMFRIQHVRKW
cAPKb
                        I W Y Q M S Q E H V Y
V Y W K V K D L K I
        LDWAT
cAPKg
        V N
               I S
                                  NKKAL
TSS M
                           ITN
              M Q
                           L
V
               G
                                    N C
                                     E M
                                     T D
                                      R
                                       T
*
        M E Y V N G G D L M F H I Q Q V G K F
I D F L T A A E I I Y Q L N D L R R W
PKCa
PKCb
        L * W I Q
V M S
                        MLWNM
                                     RKH
PKCg
                         v v
                                     KSK
PKCd
                                     SCA
PKCe
                                     NΙ
PKCet
                                     EM
PKCth
                                     T R
Akt1/Raca MEYANGGELFFHLSRERVF
        IQFVQAADIWW
LDWI *MYY
                                 ITHDKIW
Akt2/Racb
                                 M
                                    ·K *
                                           LY
DmRAC
                                 V
                                          M
                         V
         V N
               L
               M
               G
         LEYVPETVYRVARHYTKAKQII
IDFI DSIHKIIKQFSRTNLTL
GSK3a
GSK3b
                                   NWA
                                           LRNRM
         M * W L
                       L F
                             L V
Sgg/zw3
                                       N
                                           SQILV
                       M W
                             M L
ASK-a
               M
                                       Q
                                               M M
                                           I
                               M
ASK-g
                               G
                                           M
                                                V
                                                 S
K
                                           V
                                           G
         FEHVNNTDFKQLYQTL
WDYIQQSEWRNIFNII
CK IIa
СК Па'
                               MW
                                     S M
           *
             F L
                                     M V
V
             WM
                                     Ĺ
```

Figure 2B

```
L D L M N G G D L H Y H L S Q H G V F N P G F M T I I Q A A E I R F I Y N V D E D G F A W
bARK1
        MTIIQAAEIRF
bARK2
                        * M K W
                                  MTHLENPQW
GRK1
         IEML
                                        MAQAAY
I * I W
L Y
         v s v v
                          V
                                   VF -
GRK4
                                     W
GRK5
GRK6
                                             ME
                                             DG
CaMKI MQLVSGGELFDRIVEKGGY
CaMKIIa FDIITAADIWEDLIAREYF
                        * MY * KMLD
V EVMG
                                           D F W
CaMK IIb WNML
                                           A W
         YEVM
CaMK IIg
                                             Α
CaMK IId
         I
         L
         V
         LELCRRRSLLELHKRRKALF
                                           HSVW
VVIY
         IDISKKGEMMAILRA
Plx1
                  SNKDINRYW
PHATVAHMI
             Y
Polo
                                       K
                                           RKP
             M
SNK
              V
                                       Q
                                            ITM
CDC5
                  ΗQ
                             IDVM
                            VKFV
QGWF
G*Y
                  E
                                           LQ
Sak
              F
                                           ΜŤ
Prk
                  D
                                              Ι
Fnk
                                              L
Plo1
                                             M
                                              R
                                              N
                                              G
         MEYASGGEVFDYLVAHGRM
P78
         LDFGTAAKIWEFIIG
I*W DLY*WML
                                            AKI
MARK1
         I * W
MARK2
                         R M
                                   V M
Par1
         F E F L H Q D L K K F M D A V A L T G I W D H V D N E I R T Y L E K S P P P A L
CDK2
CDK4
                      * MTRWI * RAGES
VSS V GI I
                                                  V
         Y * W I E
CDK6
                                                  M
              Y M *
                                       L
                                           M
                                            V
                                       M
                                       T
                                            D
```

Figure 2C

```
T E F M S K G S L L D F L K G E T G K Y L M D Y V N H A N I V N Y I R E G S R R A V
c-Src
c-Yes
                                                DPDKQDQ
           S * H I C N
                             TMIEWM
Fyn
                WLAR
EQ
T
                                                NDEAGKI
                             QVMQ
           I
c-Fgr
                                                S R G
T K A
Q A *
A *
                                                          S V. M
Lyn
                                                          ILN
Hck
                                                          A_{\cdot}F
                     Q
Lck
                                                          NW
Csk
                                                          T E
L R
                     G
Matk
                                                          ΜI
                                                          V M
                                                             G
           MELCTLGELRSFLQVRKYSL
Fak
           IDISSIADIKTWINIKRFTI
              * M
                              * M
                                         Y M
                                                       \mathbf{w}
                                                L
                        M
           TEFMTYGNLLDYLRECNRQEV
c-Abl
            SDWISFAQIIEFIKDSQKNDI
                ΥL
                        W
                                MM * WM
                                                                L
                                 V V
                                                                M
           I E Y A P Y G N L L D F L R K S R V L E T D P A F A R E H G T T D F C R H A D I V N Y I H R N K H T F L Q H H S D I A N S P V * W S F F Q M S T W M K S K D S D F S N K P E K R R P E
Tie
Tek
PDGFR-b
                                                        NAWSLCRDKAPKKR
IEYVPYGERSLEMS
LI*IEQ WGGDQQD
MM MNF Y*LKDFK
                   T\bar{K}\bar{W}
                              ÈVIE
                                                A T
                                           V
PDGFR-a
           L
                                   M Q
T S
                                                G Q
T R
                   G W
           M
Flt1
                      Y
            S
Flt4
Flk1
                                                                               ΜI
                                                        E V
                                                                W T
                                                                           T
                                                                                       T
                                                                     W
                                                        Q D
                                                                               V M
T V
                                                                YIS
                                                                                       R
                                                                                        I
                                                                  M
                                                                                       L
V
                                                                                  G
*
                                                                   V
                                                                                       N
W
Y
```

STLYSNAL Tie AEFGLEPA Tek DIEKMVEG PDGFR-b KKRAVGDI PDGFR-a RFDFTQGM GSIWID*V Flt1 Flt4 TDMR I Flk1 ELV L MW M Ϋ́ Α R K w * Y

Figure 2D

```
V E Y A S K G N L R E Y L Q A R R P P G L E Y C I D C G A R A Q I K D F I R G K K AMD L S
                                                            YNPSHNP
FDINRVS
Flg
                                                                   NRVS
Bek
                                                            P Q
W E
        . L *
                               * WMN
                                                    P *
                                                        FT
                                                                     ΚP
                                                                 T
                                                                   \mathbf{C}
             F
                  T
                          M
FGFR-3
                                                    Ι
                                                        W
                                                                G P
                                                                       S
                                   V K
             W
                 G
FGFR-4
         M
                                                               *
                                                                       Q
                                                        Ι
                                                                 LT
                                                                 M Q
                                                        M
                                                                 V
                                                                       L
                                                                 Š
                                                                       M
                                                                       T
Flg
         EQL
         G P M
Bek
FGFR-3
         DNI
FGFR-4
         LPYMKHGDLRNFIRNETHNP
c-Met
                      AEILHWLKAQERS
         I
             FIR
c-Sea
             W L C
V S
                                       SPQKQ
                         * M K Q Y M
         M
Ron
                                       QDS
TND
G*N
                           VI
                            M
                             v
                                       G
         TQLMPFGCLLDYVREHKDNI
EGFR
         SNYL
                    YASIIEHIHQNRGRL
ErbB2
                        TMM*FLKDQ
             II
                    L
                                              EAM
ErbB3
                                              A Q V
* K
             M V
ErbB4
                    H
                           V V
                                 WM
                                       N
              v
                    W
             F
                                                G
                    I
             W
                    M
         V E Y A K Y G S L R G F L R E S R K V G P G Y L G S G G S R N I D F G R F A T I K A W I K D T K R I A A F I A T A A T K Q
Ret
         L * W
                    W
                                 Y M
                                                L
                                                        WM
                          M
                                                M
         M
         SSLDHPDERAL
Ret
                      EDKGI
         TTIE
             M *
                              M
                               V
              V
```

Figure 2E

```
MEMAELGPLNKYLQQNRHVI
IDIGGGA IHRFIVGKKEEL
Syk
Zap70
          L
              DΙ
                    M Q
                          WMNNQ
                                    DIM
           v
              A M
                     V
                            VIAR
                                     LV
                V
                             L
                                     M
                             M
                                     D
       MEFLPSGSLKEYLPKNKNKI
Jak1
       I \cdot D \cdot Y \cdot I
                YACIRDFIQRHRERL
T TM *WMN QSA M
Jak2
       L * WM
V V
                        * WMN
                                Q S A
T Q
Jak3
                                       M
                F
Tyk2
                                    Q
                ar{	extbf{w}}
                                    D
                L
                                    G
                I
                                    I
       LEYAPLGTVYRELQKLSKF
IDFG IASIFKDINRITRW
Iak1
                IASIFKDINRITRW
       M * W
                     L W
                          * M
               M
                    M
Chk1
       LEYCSGGELFDRIEPDIGM
       IDFSTAADIWEKLD
                                ELAI
                   * M Y *
                           M *
                                 * M
                     V
       MEYCSGGDLRKLLNKPENCCGL
IKK-1
IKK-2
       IDFSQAAEIKRYIQQFDQSSAI
         * W
              T
                              R W *
       L
                    M
                          IM.
                                          M
                         M V
                              NY
                          V
                          F
                          W
DAPK
       LELVAGGELFDFLAEKESL
       I D I I G A A D I W E W I G D R D T I
                   * M Y * Y M
       M * M L
          V M
IRK
       MELMAHGDLKSYLRSLRPEAENNPGRPPPTL
                 AEIRTFIKTIK
       IDIIG
                                     DGDQQ
                                               A K
                                                        SI
        * M L
                   * M
                         WM
                                M
                                                         M
                                                         V
       TAFHAKGNLQEYLTRHVI
TGFbRII
       s \,\, g \, w
             ERASISDFIKANIV
ACTRIIA
                   QMT * WMS GQLL
TV VRK MM
             D
ACTRIIB
              G
```

MM

Figure 2F

```
THYHEHGSLYDFLQRQTL
SDF DMATIFEYIKLTSV
ALK1
ALK2
                          MW * WMNCA
V VRSY
                    N
I
           E W
                                              I
ALK3
ALK4
                                              M
                                       ΚN
ALK5
                    v
                                        I S
ALK6
                    Q
                                       M F
                                        v w
                                        T G
```

Trk-NGFR F E YMR H G D L N R F L R S H G P D A K L L A G G E D V A P TrkB WD F I K A E I Q K W I K A A E G V I M V E A N P P T E TrkC Y * W L * M YM T * MM I I D Q E R Q A V V V G R V V L A D * I S D QERQA D*ISD M * Ι LNG MG * G L K

Trk-NGFR P L L G E I TrkB TrkC A I M M V v D

TDYMENGDLNQFLSAHQL DDR1 SEFIDQAEIQNWITR ÈΡ DDR2 ΝI ΥM * WL * M K DVV G * M

THWMPYGSLYNVLHEGTNFVV SFI FATIFQII DASQWII YL W MW LM * YLL ILK ΜV V M ΜM

Figure 3A

Peptide <u>Akt1/Raca</u>	N-terminal																							-	С	-terminal
95 K014D001	Myristyl -	G	M	E	Y	A	N	G	G	E	L	F	F	H	L	S	R	E	R	٧	F					- NH2
ALK1																										
96 K048D101	Myristyl -	G	T	H	Y	H	E	H _.	G	S	L	Y	D	F	L	Q	R.	Q	T	L						- NH2
<u>Braf</u>																									,	
97 K003D001	Acetyl -																							•		- NH2
98 K003D101	Myristyl -	G	T	Q	W	S	E	G	S	S	L	Y	H	H	L	H	I	I	E	T	K	F				- NH2
<u>c-Abl</u>																										
99 K061D101	Myristyl -	G	T	E	F	M	T	Y	G	N	L	L	D	Y	L	R	E	С	N	R	Q	E	V	<i>!</i>		- NH2
<u>c-Met</u>												•														
100 K073D101	Myristyl -	G	L	P	Y	M	K	H	G	D	L	R	N	F	I	R	N	E	T	H	N	P				- NH2
c-Raf																										
101 K001D101	Myristyl -															H	V	Q	E	T	K	. F				- NH2
102 K001D001	Acetyl -	S	S	L	Y	K	H	L	H	V	Q	E!	T	K	F											- NH2
c-Sea																										
103 K074D101	Myristyl -	G	L	P	Y	M	R	H	G	D	L	R	H	F	I	R	A	Q	E	R	S	P	,	•		- NH2
c-Src																										
104 K051D101	Myristyl -																G	E	T	G	K	Y	Ί			
105 K051D001	Acetyl -	G	S	L	L	D!	L	K	G	E	! T	G	K	F	L											- NH2
CDK2																										
106 K049D101	Myristyl -																S	A	L	T	G	ιI			•	- NH2
107 K049D001	Acetyl -	D	!L	K	K	F	M	D	A	S	A	L	T	G	M	[- NH2
CDK4			,																							
108 K050D001	Acetyl -																									- NH2
109 K050D101	Myristyl -	G	F	E	H	V	D	Q	D	L	R	T.	Y	L	D	K	. A	P	P	P	G	i L	•			- NH2
CDK6																										7.4
110 K089D101	Myristyl -	G	F	E	H	V	D	Q	D	L	T	T	Y	L	D	K	. V	P	E	P	C	; V	7			- NH2
Chk1																			_	_	_					
111 K088D102	Myristyl -																									- NH2
112 K088D101	Myristyl -	G	E	Y	A	S	G	G	E	L	F	D	R	I	E	P	D	I	G	· N	1					- NH2
CK IIa														_		_	_	_								3 77 70
113 K022D001	Acetyl -																			L	•					- NH2
114 K022D101	Myristyl -	G	F	E	H	V	N	N	T	D	F	K	Q	L	Y	Q	T	L								- NH2

Figure 3B

<u>Csk</u>																										
115 K058D101	Myristyl -	G	T	E	Y	M	A	K	G	S	L	V	D	Y	L	R	S	R	G	R	S	V	7]	L		- NH2
116 K058D001	Acetyl -	G	S	L	V	D!	L	R	S	R	G	R	S	V	L											- NH2
<u>Fak</u>																										
117 K060D101	Myristyl -	G	M	E	L	S	T	L	G	E	L	R	S	F	L	Q	٧	R	K	Y	S	L	,			- NH2
FGFR-3																									•	
118 K071D101	Myristyl -	G	G	N	L	R	E	F	L	R	A	R	R	P	P	G	L	E								- NH2
119 K071D001	Acetyl -	G	N	L	R	E!	F	L	R	A	R	R	P	P	G	L	E	!								- NH2
120 K071D102	Myristyl -	G	V	E	Y	A	A	K	G	N	L	R	E	F	L	R	Α	R	R	P	P	• •	} :	LE		- NH2
121 K071D901	Stearyl -	G	s	F	D	T	S	K	P	P	E	E	Q	L												- NH2
<u>Flk1</u>																										
122 K068D101	Myristyl -	G	V	E	F	S	K	F	G	N	L	S	N	F	· L	R	A	K	R	. 1	IL	, F	7	V P		- NH2
123 K068D101	Myristyl -	G	Ġ	N	L	S	N	F	L	Ŕ	A	K	R	N	L	F	V	P						•		- NH2
124 K068D001	Acetyl -	G	N	L	S	N	F	L	R	Α	K	R	N	L	F	V	P									- NH2
125 K068D901	Stearyl -	G	R	F	R	Q	G	K	D	Y	V	G	E	L												- NH2
GSK3b													•											•		
126 K018D003	Acetyl -	K	K	K	K	K	K	G	G	G	V	Α	R	H	Y	S	R	Α	K	. (Γ (I	_	P		- NH2
127 K018D002	Acetyl -	V	A	R	H	Y	s	R	Α	K	Q	T	L	P												- NH2
128 K018D101	Myristyl -	G	Ď	Y	V	P	E	T	V	Y	R	V	Α	R	H	Y	S	R	. A	ŀ	(2 1	Γ	L	.;	- NH2
129 K018D001	Acetyl -	R	V	Α	R	H	Y	S	R	Α	K	Q	T													- NH2
<u>Hck</u>									•																	
130 K056D101	Myristyl -	G	T	E	F	M	A	K	G	S	L	L	D	F	L	K	S	D	E	. (3 S	F	K	Q		- NH2
<u>Iakl</u>										-																•
131 K087D101	Myristyl -	G	L	E	Y	Α	P	L	G	T	V	Y	R	E	L	Ç	K	L	S	ŀ	C F	7				- NH2
<u>IKK-1</u>														•												
132 K090D101	Myristyl -	, G	M	Έ	Y	S	S	G	G	D	L	R	K	L	L	N	IK	P	E	. 1	1 5	5 5	3	G L	•	- NH2
IKK-2																										
133 K091D101	Myristyl -	G	M	Ε	Y	S	Q	G	G	D	L	R	K	Y	L	N	ı Ç	F	E	1	1 5	5 5	S	G L	,	- NH2
<u>ILK</u>						. '		-			•															
134 K107D101	Myristyl -	G	T	H	W	M	P	Y	G	S	L	Y	N	V	L	F	E	C	T	. 3	1 F	7 1	V	V		- NH2
135 K107D901	Stearyl -	G	Y	N	V	L	H	E	G	T	N	F	V	V	•	_										- NH2

Figure 3C

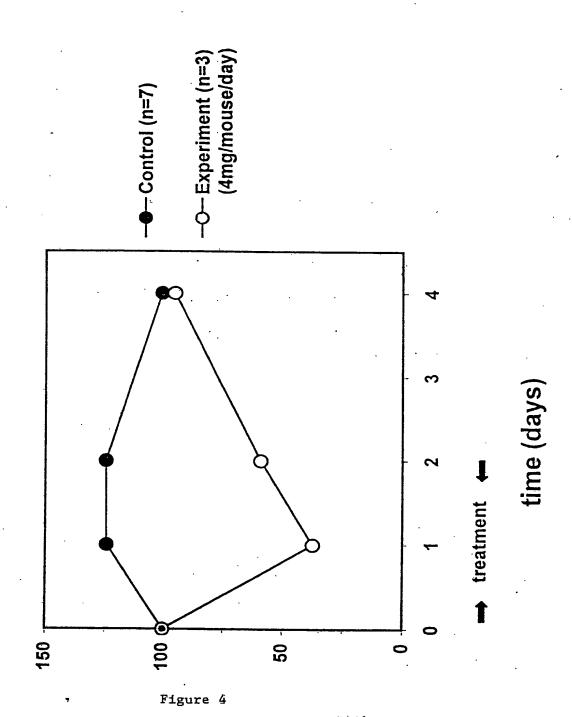
<u>IRK</u>																											
136 K094D101	Myristyl -	G	M	E	L	M	A	H	G	D	L	K	·S	Y	L	R	S	L	R	P						- NH	[2
137 K094D001	Acetyl -	Α	Q	N	N	P	G	R	P	P	P	T	L													- NH	[2
138 K094D102	Myristyl -	G	L	K	S	Y	L	R	s	L	R	P .	E	A												- NH	[2
139 K094D103	Myristyl -	G	Α	E	N	N	P	G	R	P	P	P	T	L												- NH	[2
140 K094D104	Myristyl -	G	L	R	P	E	Α	E	N	N	P	G	R	P	P	P	T	L							•	- NH	[2
<u>Jakl</u>																											
141 K084D101	Myristyl -	G	M	Е	F	L	P	S	G	S	L	K	E	Y	L	P	K	N	K	N	K	I				- NE	12
142 K084D102	Myristyl -	G	L	K	E	Y	L	P	K	N	K	N	K	I												- NF	I 2
Jak2	-					•																					
143 K085D102	Myristyl -	G	L	R	D	Y	L	Q	K	Н	K	E	R	I												- NF	12
144 K085D105	Stearyl -	G	L	R	D	Y	L	Q	K	Н	K	E														- NF	1 2
Jak3																											
145 K086D101	Myristyl -	G	M	E	Y	L	P	s	G	S	L	R	D	F	Ĺ	Q	R	H	R	. A	. L	,		-		- NI	1 2
146 K086D102	Myristyl -	G	M	Ε	Y	L	P	S	G	S	L	R	D	F	L	Q	R	H	R	. A	. R	l				- NI	1 2
147 K086D103	Myristyl -	G	L	R	D	F	L	Q	R	H	R	A	R	L												- NI	1 2
<u>Lck</u>	-																										
148 K057D001	Acetyl -	G	S	L	v	D!	L	K	T	P	S	G	I	K	L											- NF	1 2
149 K057D101	Myristyl -	G	T	E	Y	M	E	N	G	S	·L	V	D	F	L	K	T	P	S	G	I	ŀ	ζ]	L		- NI	1 2
<u>Lyn</u>																					_						
150 Ķ055D101	Myristyl -	G	T	E	Y	M	A	K	G	S	L	L	D	F	L	·K	S	D	E	G	G) F	Κ,	V		- NI	12
MARK1																											
151 K045D101	Myristyl -	G	M	E	Y	A	S	G	G	Ε	V	F	D	Y	L	V	Α	Η	G	R	. N	1				- NI	1 2
PDGFR-b																											
152 K064D001	Acetyl -	G	D	! L	V	D!	Y	L	H	R	N	K	H	T	F	L										- NI	12
153 K064D101	Myristyl -	G	T	Ė	Y	S	R	Y	G	D	L	V	D	Y	L	H	R	N	K	Η	(T	. I	F]	L		- NI	-1 2
<u>PKCb</u>																											
154 K008D101	Myristyl -	G	M	E	Y	V	N	G	G	D	L	M	Y	H	I	Q	Q	V	G	R	F	7				- NI	12
155 K008D001	Acetyl -	K	K	K	K	K	K	G	G	D	L	M	Y	H	I	Q	Q	V	G	R	F	i			٠	- NI	12
Pik																											
156 K035D001	Acetyl -	R	S	L	L	E!	L	Н	K	R	R	K	A													- NI	H2
157 K035D101	Myristyl -	G	R	S	L	L	E!	L	Н	K	R	R	K	Α												- NI	H2

Figure 3D

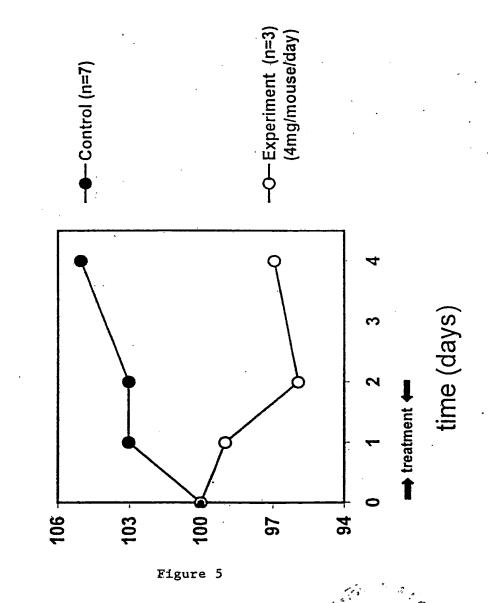
158 K035D102	Myristyl -	G	L	E	L	S	R	R	R	S	L	L	E	L	H	K	R	R	K	A	L					-	NH2
<u>Ret</u>																											
159 K080D101	Myristyl -	G	V	E	Y	A	Ķ	Y	G	s	L	R	G	F	L	R	E	Ş	R	K	V	G	i P	1		-	NH2
160 K080D001	Acetyl -	G	S	L	R	G	F	L	·R	E!	S	R	K	v	G	P										-	NH2
Ron	•																										•
161 K075D101	Myristyl -	G	L	P	Y	M	С	H	G	D	L	L	Q	F	I	R	S	P	Q	R	N	P	•			-	NH2
<u>SNK</u>																											
162 K038D101	Myristyl -	G	L	E	Y	s	S	R	R	s	M	Α	Н	I	L	K	A	R	K	V	Ŀ					-	NH2
<u>Syk</u>																											
163 K082D101	Myristyl -	G	M	E	M	Α	E	L	G	P	L	N	K	Y	L	Q	Q	N	R	Н	V					-	NH2
<u>TGFbRII</u>									•	•																	
164 K093D101	Myristyl -	G	Т	A	F	н	Α	K	G	N	L	Q	E	·Y	L	T	R	Н	v	I						-	NH2
<u>TrkB</u>				•											•								-				•
165 K102D101	Myristyl -	G	F	E	Y	М	K	Н	G	Ð	L	N	K	F	L	R	A	Н	G	P	D) <i>[</i>	4 1	VL	M	Α -	NH2
166 K102D106	Myristyl -																										NH2
167 K102D107	Myristyl -	•																									NH2
168 K102D108	Myristyl -													A													NH2
169 K102D109	Myristyl -																		•								NH2
Zap70		_	-						_	_		-															
							_		_		_			_	٠.			. 7,		_	-	, ,	,				- NH2
170 K083D101	Myristyl -	G	M	E	M	Α	G	G	G	P	L	H	K	F	L		G	K	K	. E	בי	, I				-	- 11112

K:\RWAGNER\CMCC\679\FIGURES

% change in daily food consumption (g/mouse/d)



% change in body weight



MODULATION OF TH1/TH2 DIFFERENTIATION BY A JAK-DERIVED PEPTIDE

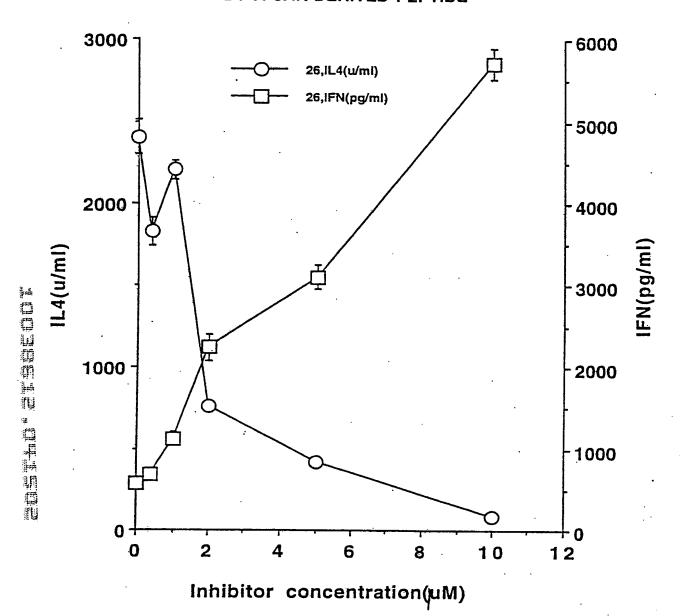


Figure 6

Fig.